

NWP512B Implement and manage catchment management plan

Revision Number: 2



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Modification History

NWP512B Release 2: Layout adjusted. No changes to content.

NWP512B Release 1: Primary release.

Unit Descriptor

This unit of competency describes the outcomes required to implement and manage activities in water catchments that impact on water yield and/or quality to ensure performance measures for the catchment management plan are met.

Application of the Unit

This unit supports the attainment of skills and knowledge required for managers in water organisations with responsibility for the management of water catchments.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where **bold** outcomes of a unit of *italicised* text is used, further information is detailed in the range statement. Assessment of performance is to be consistent with the evidence guide.

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Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- 1 Prepare for catchment management.
- 1.1 Confirm performance measures for the catchment management plan.
- 1.2 Identify and interpret *catchment management* requirements.
- 1.3 Identify *user and customer* requirements that impact on the catchment area.
- 1.4 Gather *historical catchment information* and evaluate as input to the management process.
- 1.5 Identify, interpret and assess water quality and quantity requirements.
- 1.6 Identify and interpret *environmental factors* and other relevant *issues* that impact on the catchment area.
- 2 Implement the catchment management plan.
- 2.1 Inform and educate stakeholders about catchment activity regulations.
- 2.2 Develop management plan activities.
- 2.3 Develop the implementation plan.
- 2.4 Coordinate management plan activities.
- 3 Monitor the catchment management plan.
- 3.1 **Design** and implement **monitoring** and testing programs.
- 3.2 Analyse, interpret and record testing results.
- 3.3 Coordinate and manage the identification and investigation of current and/or potential problems.
- 3.4 Report the results of the investigation of problems and make recommendations.
- 3.5 Monitor the catchment area usage according to the plan.
- 3.6 Coordinate and manage the identification, investigation and reporting of breaches of usage provisions.
- 4 Monitor and evaluate the catchment management plan.
- 4.1 Review objectives of the management and implementation plans.
- 4.2 Make recommendations for changes to objectives and implementation procedures.

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Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

- communicate effectively to a wide and diverse group of stakeholders
- interpret and apply legislation and policies
- design and manage measuring and testing activities
- analyse test results
- coordinate and oversees the conduct of investigations
- assess environmental impact
- implement management plans
- develop implementation plans that reflect management plan objectives and organisational requirements
- prepare reports and recommendations

Required knowledge:

- relevant historical records
- relevant legislation
- relevant enterprise policies
- range of appropriate measuring and testing procedures
- · investigation procedures
- risk management principles
- customer expectations and requirements
- occupational health and safety and environmental legislation
- Acts and procedures

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Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit The candidate should demonstrate the ability to implement and manage activities in water catchments that impact on water yield and quality to ensure performance measures for the catchment management plan are met including:

- gathering, interpreting and synthesising information (including historical data, current legislation and standards, stakeholder views and water quality test results) to underpin the sound management of the water catchment plan
- consulting widely and effectively
- developing effective implementation plans that address the objectives and requirements specified in the management plan
- developing, implementing and overseeing testing and other monitoring arrangements to track the performance of the catchment management plan
- preparing reports and recommendations for future action

Context of and specific resources for assessment

Access to the workplace and resources including:

- documentation that should normally be available in a water industry organisation
- relevant codes, standards, and government regulations

Where applicable, physical resources should include equipment modified for people with disabilities.

Access must be provided to appropriate learning and/or assessment support when required.

Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice
- a decision of competence should only be made when the assessor has complete confidence in the person's

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- competence over time and in various contexts
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence
- where assessment is for the purpose of recognition (RCC/RPL), the evidence provided will need to be authenticated and show that it represents competency demonstrated over a period of time
- assessment can be through simulated project-based activity and must include evidence relating to each of the elements in this unit

In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in a manner appropriate to the skill levels of the operator, any cultural issues that may affect responses to the questions, and reflecting the requirements of the competency and the work being performed.

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Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. *Bold italicised* wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Catchment management requirements may include:

- relevant federal legislation
- relevant state or territory legislation
 - relevant local government by-laws
- · organisational needs
- codes of practice

User and customer may include:

- recreational users of the catchment area
- forestry and land management authorities
- housing developers and home owners
- farmers
- traditional land owners
- consumers of water
- water authorities

Historical catchment information may include:

- relevant hydrometrical information
- previous monitoring studies
- previous risk assessments
- vegetation surveys
- anecdotal information from land holders
- geological data
- hydro-geological data

Environmental factors that impact on the catchment area may include:

- flora
- fauna
- chemicals
- land degradation
- nutrients
- fire breaks
- farming practices
- · land use

Issues that impact on or relate to the catchment area may include:

- existence of known cultural sites
- land use patterns
- environmental issues
- other human activity

Monitoring and testing programs are designed and may include reference to:

- sampling and testing procedures
- the testing medium
- the testing frequency

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- sampling locations
- testing variables

Unit Sector(s)

Not applicable.

Competency field

Collection and distribution.

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